# *Remote Order Entry System*

# *(ROES)*

# *Technical Manual*

***Version 3.0***

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# Preface

## *Purpose of the Remote Order Entry System*

The Remote Order Entry System Version 3.0 (ROES 3.0) gives authorized end users at VHA facilities the ability to order products and services from the VA Denver Distribution Center (DDC).

## *Scope of Manual*

This manual provides instructions for the installation and maintenance of the ROES 3.0 software.

## *Audience*

The information in this manual is intended for Information Resource Management (IRM) staff. However it may also be helpful to: National **V***ist***A** Support (NVS), System Design & Development (SD&D), and ADPACs in Audiology and Speech Pathology Service (ASPS) and Prosthetics and Sensory Aids Service (PSAS).

## *Related Manuals*

*Remote Order Entry System (ROES) Version 3.0 Security Guide*

*Remote Order Entry System (ROES) Version 3.0 User Manual*

*Remote Order Entry System (ROES) Version 3.0 Installation Guide*

# Introduction

The Remote Order Entry System (ROES 3.0) gives authorized end users at VHA facilities the ability to order products and services from the VA Denver Distribution Center (DDC). This manual provides information regarding the technical components of the ROES 3.0 software. The information in this manual is intended for IRM or equivalent staff who are responsible for the installation, maintenance, and support of the ROES 3.0 application and local facility **V*ist*A** and general IT resources.

## *Purpose of ROES 3.0*

ROES 3.0 was developed to simplify and enhance the ordering of products and services from the Denver Distribution Center (DDC) including hearing aids and numerous other commodities. Ancillary functions such as updating patient records and registering devices may also be done through the Web interface. ROES 3.0 is accessed from the end user's workstation as a Web application through the browser allowing orders to be placed using an interactive, real-time, point and click interface. ROES 3.0 also accommodates keyboard navigation and entry.

ROES 3.0 was designed to use advanced technologies and practices in software design, supporting hardware platform, database management, and network integration to provide DDC customers and staff with simple and easy to use ordering capabilities. The application provides patient care providers and associated Veterans Health Administration (VHA) staff with comprehensive patient information and order histories. It was also designed to use progressive procurement and distribution practices, advanced general business practices, and current VA Regulations, which have evolved since the introduction of ROES 2.0

A definitive criterion used to establish the strategic direction and development path for ROES 3.0 involved combining:

- The necessity to optimize compatibility and data communications capability with established VA systems and business practices
- The objective of applying leading edge information technology resources to strategic business systems development, comparable to the best that can be found in the private sector
- The desire to provide a "progressive continuity" to DDC customers, implementing significant enhancements to the existing application, while minimizing transition apprehension for end users

## *Benefits of ROES 3.0*

The ROES 3.0 application architecture makes available, for the first time, a Web-based application for activities such as order placement and inquiry functions, while retaining and improving upon the character-based interface formerly used in ROES 2.0. It is expected that a Web interface, enabling point-and-click functionality, allows information to be presented in a more organized fashion, enhancing the navigation and data entry procedures.

In another departure from previous versions, the majority of ROES 3.0 system software and data files reside on DDC computer resources, leaving only selected key components on local Medical Center systems. There are a number of factors supporting this transition. These include:

- Assurance of a singularity and consistency of the available product database
- Opportunity for immediate real-time processing of orders placed
- Reduced dependency on VAMC application of patches and file modifications

Higher capacity VA wide area network resources implemented since ROES 2.0 enable these architectural changes.

In addition to the overall architecture, ROES 3.0 provides a number of process-specific benefits, features, and functionality improvements, such as the following:

1. Provides users with a simplified ordering process.
2. Includes cost comparison functionality for display/selection of all contract hearing aids meeting selected specifications.
3. Allows repair orders to be entered by the provider.
4. Includes a module to enter audiometric data and display or print the resulting audiogram in graph or tabular format.
5. Provides information in "real time".
6. Provides enhanced commodity ordering capabilities.
7. Provides enhanced device registration capabilities.
8. Provides enhanced display/update capabilities for authorized aids.
9. Provides enhanced station stock ordering capabilities.
10. Decreases delivery time to patients since orders are submitted immediately for processing.
11. Links with the CPRS clinical record application already in place in the VHA environment.
12. Provides increased accuracy in patient eligibility determination prior to order placement, with improvements to subsequent reporting and statistical analysis.

13. Provides access to multiple ROES 3.0 functions (clinical and administrative) through a comprehensive entry point.

14. Provides supervisory designation of user authorization/approval levels.

15. Provides a Cochlear Implant registry for tracking of cochlear implant information.

16. Reduces the likelihood of erroneous orders (i.e., orders for combinations of device specifications that cannot be accommodated by hearing aid manufacturers).

# Orientation

## *General Rules for ROES 3.0 Data Entry pages*

1. There are no "double clicks" in ROES 3.0. Click the selection one time only.
2. There are no "right mouse button" commands in ROES 3.0.

**NOTE**: There is a key distinction between Windows-based applications (where double-clicks and right-button functionality are common) and web applications. There will not be a noticeable consequence to the user for these actions; however, the results may be unexpected. Double clicking may cause a drop-down list to open and close quickly. Right-clicking will produce selectable functions made available by the browser, but nothing specific to ROES. We strongly discourage use of the right-click in order to prevent the use of the browser's back and forward functions.

3. It is recommended that users not click the "X" in the top right hand section of the ROES 3.0 browser window to close a window. Use the navigational links and buttons provided within the application to exit the system. Closing the browser window without properly exiting the application will not have any detrimental effects on the user but may leave an open user session and incomplete or 'phantom' order information in the application.
4. Only use the

command buttons provided on the ROES 3.0 pages for navigation - never use the windows provided "back" and "forward" commands.
5. The command buttons within the application perform background housekeeping functions that maintain the integrity of the order as a user navigates through the ordering process. The Windows browser's 'Forward' and 'Back' commands bypass those functions and could result in loss of information from the order.
6. "Grayed out" fields cannot be accessed.
7. Any

button will return you to the *View Order History* page.

## *Symbols Used in Manual*

In code examples, the caret (^) or 'U' may be used interchangeably as separators.

The caret is also used to designate a global reference when used in front of a global name as in ^DPT (

## *ROES 3.0 Display Considerations*

**IMPORTANT NOTE**: ROES 3.0 application pages display best at a display resolution of 1024x768. If this is not an end user's preferred resolution, ROES pages will not appear properly formatted. This will not affect application functionality, but may make page content more difficult to understand and navigate. If an end user chooses to increase their resolution to 1024x768, they should be aware that all other Windows applications and objects in their Windows environment will be reduced in size.

## *Recommended Desktop Minimums for ROES 3.0*

| SPECIFICATION | RECOMMENDED MINIMUM |
|---|---|
| **Processor** | 200 MHz |
| **Memory** | 64 MB |
| **Hard Drive** | 4GB |
| **Video** | AGP 2x w/4MB |
| **CD-ROM** | 8x |
| **Monitor** | 17" VGA, .28 pixel resolution |
| **LAN Interface** | 10/100 Mbps Ethernet |
| **Keyboard** | 101 -key |
| **Mouse** | Microsoft Compatible |
| **Operating System*** | Microsoft Windows 9x<br><br>Microsoft Windows NT Workstation v4.0 or Windows 2000 Pro strongly recommended. |
| **Browser**** | Internet Explorer v5 |

***NOTE**: ROES 3.0 is compatible with Microsoft Windows XP.

****NOTE**: There are no minimum Browser Service Pack requirements.

A system meeting the above specifications can be expected to provide the functionality necessary for ROES 3.0. The VA Assistant Secretary for Information and Technology has established a set of minimum configurations for any new procurement of desktop systems across the enterprise (VA Directive 6401). For most of the specifications listed above, the VA minimum baseline exceeds the recommended minimum for ROES 3.0. The above specifications are provided to allow for use of equipment in current inventory, if necessary. In assessing procurement and/or other resource acquisition actions to meet ROES 3.0 desktop requirements, each facility is advised to give consideration to the specifications mandated by the above-mentioned Directive. Conformance with these established and/or emerging VA standards is encouraged. A dynamic update of the VA desktop standards is maintained at *http://vaww.vairm.vaco.va.gov/vadesktop/*.

## *Getting Additional Information*

Refer to the following resources for additional information about the Remote Order Entry System (ROES).

- Visit the **V*ist*A** document library: http://www.va.gov/vdl/ for the ROES 3.0 PDF and WORD documentation.
- Use the *KIDS Build File Print* [XPD PRINT BUILD] option if you would like a complete listing of package components exported with this software.
- Use the *KIDS Install File Print* [XPD PRINT INSTALL FILE] option if you'd like to print out the results of the installation process.
- Use the *List Routines* [XUPRROU] option prints a list of any or all of the ROES 3.0 routines.
- The Installation and User manuals also contain additional information.

# Chapter 1: Implementation and Maintenance

## *Application Architecture Overview*

ROES 3.0 includes application components that reside on two systems: the VAMC **V***ist***A** system and the DDC system. The VAMC components include 'M' routines, RPC Broker calls, and Delphi executables. The general purpose of these components is to gather information and initiate an interactive session to the DDC-resident ROES 3.0 Web application, passing the assembled information to the application. Once in the Web application, ROES users then place orders and perform other order management functions within that application.

Different capabilities within ROES 3.0 are invoked by each of two Delphi executables. One executable and associated set of broker calls integrates as an option on the CPRS Tools menu (see also *Chapter 3: Charts*). This set of components performs the following functions:

- Gathers patient information for the selected patient
- Determines or initiates a request for determination of the patient's eligibility for DDC services
- Assembles patient and user information
- Initiates a browser session to the ROES 3.0 Web application and passes the assembled information to ROES
- Allows for copying of specified order information to the Windows clipboard with subsequent pasting to a CPRS Progress Note or to an external application

The second combination of Delphi executable and associated set of broker calls comprises an executable *application* that can be invoked directly (separate from CPRS) or from an application shortcut, and performs the following functions (see also *Chapter 3: Charts*):

- Assembles user information
- Initiates a browser session to the ROES 3.0 Web application and passes the assembled information to ROES 3.0

The DDC-resident component of ROES 3.0 exists as a Web-based order entry application. The interactive order entry process utilizes the browser as the application interface. Depending on which of two ROES 3.0 entry points is accessed (determined by the calling Delphi executable), end users have access to specific functional modules associated with the entry and management of orders for DDC products and services. Navigation and order entry is accomplished using typical Windows and Web methods, including drop-down selection, check boxes, radio buttons, free text, etc. Information entered in the Web application is processed by the DDC order fulfillment system.

## *Overview of Installation Instructions*

Implementation of ROES 3.0 requires both server-side **V***ist***A** installation procedures and client-side desktop installation procedures.

The ROES 3.0 distribution package includes a KIDS build. The KIDS build installs the necessary routines, menu options, and RPC broker calls within the **V***ist***A** environment.

The ROES 3.0 GUI requires that the RPC Broker V1.1 be installed on any workstation from which the GUI will be executed. Refer to the RPC Broker Website: http://*vista*.med.va.gov/broker/download.asp to install the RPC Broker.

**NOTE**: If a workstation can already connect successfully via CPRS, BCMA, or PCMM, then the RPC Broker has already been installed.

Refer to the *ROES 3.0 Installation Guide* for complete installation instructions.

## *Companion QUASAR Patch*

**IMPORTANT NOTE**: DDC ROES 3.0 order processing incorporates patient-specific audiometric information from the Quality: Audiology and Speech Pathology Audit and Review (QUASAR) package. A companion QUASAR patch (ACKQ*3.0*3) provides end users with data entry and display capabilities for this information. It is recommended that ACKQ*3.0*3 be installed concurrently with ROES 3.0.

# Chapter 2: Files

There is one file exported with the ROES 3.0 package. It is for the storage of eligibility requests and replies. It is a standard ROES name spaced (RMPF), FileMan-compatible file.

When the internal application logic is not able to definitively determine a patient's eligibility (see *Application Architecture Overview*), a request is sent to a designated PSAS mail group for eligibility determination. This process uses the ROES ELIGIBILITY CONFIRMATION file (#791814) to temporarily store pending eligibility information, along with the **V***ist***A** MESSAGE file (#3.9) reference where comments related to this eligibility determination process are held.

The eligibility determination process creates entries in the "^RMPF(791814," global in the following format:

```
^RMPF(791814,D0,0)= (#.01) PATIENT [1P] ^ (#.02) DATE REQUEST ENTERED
[2D] ^ (#.03) ENTERING USER (ASPS) [3P] ^ (#.04) EXPIRATION DATE [4D] ^
^RMPF(791814,D0,1)= (#1.01) SUGGESTED ELIGIBILITY [1F] ^ (#1.02) EMAIL
MSG NUMBER [2P] ^
^RMPF(791814,D0,2)= (#2.01) PSAS ELIGIBILITY [1F] ^ (#2.02)
APPROVE/REJECT^ (#2.03) USER (PSAS) [3P] ^ (#2.04) ACTION DATE [4D] ^
```

All information local to the station or clinic is stored in this global while awaiting PSAS approval of eligibility and is kept in the file a defined period after approval or rejection (for order modifications). This global entry is created and referenced by the ROES 3.0 application to ensure that requests for eligibility determination are acted upon in a timely manner and to provide a database of eligibility if additional ROES-related actions are necessary within a defined time period after the original determination. Currently this defined period is two years.

A record is created when a request for PSAS eligibility determination is initiated. The entry remains for up to 60 days after creation while awaiting PSAS action on the request. Beginning seven days after creation, if there has been no PSAS action, a daily alert is generated (option RMPFDE4) to mail group RMPF ROES UPDATES (PSAS) as a reminder of the request. PSAS action generates a VA MailMan message, via option RMPFDE2, to the RMPF ROES UPDATES (ASPS) mail group indicating approval or disapproval.

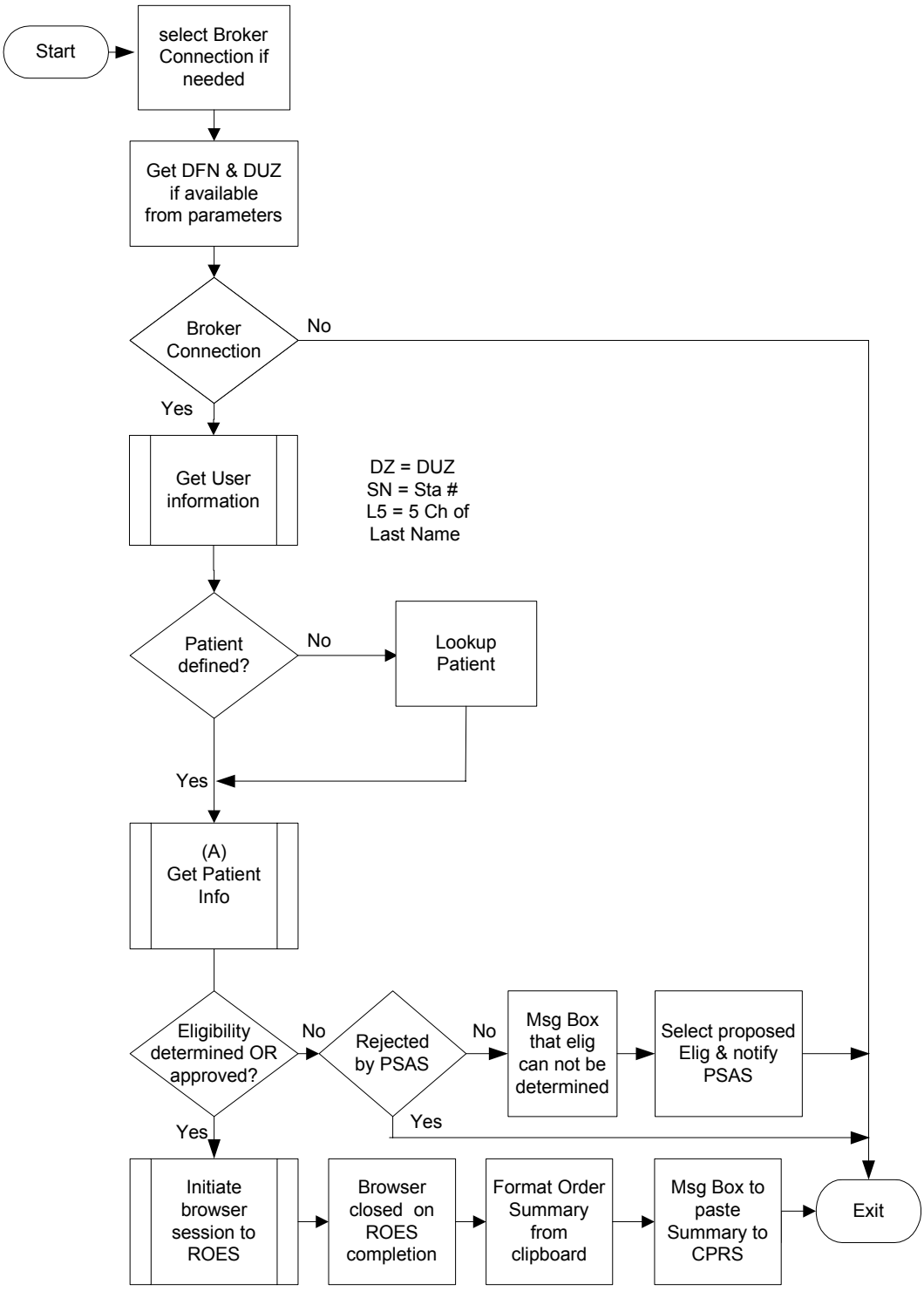
Additional information on this process is available in *Chapter 5: Exported Options*.

# Chapter 3: Charts

## *ROES 3.0 Patient Order from CPRS*

This ROES 3.0 access point is used when performing functions that are primarily patient-specific. In accordance with Standard Operating Procedure (SOP) 192-507, the patient identifier obtained from the Master Patient Index (MPI-**V***ist***A**) is included in information passed to the DDC.

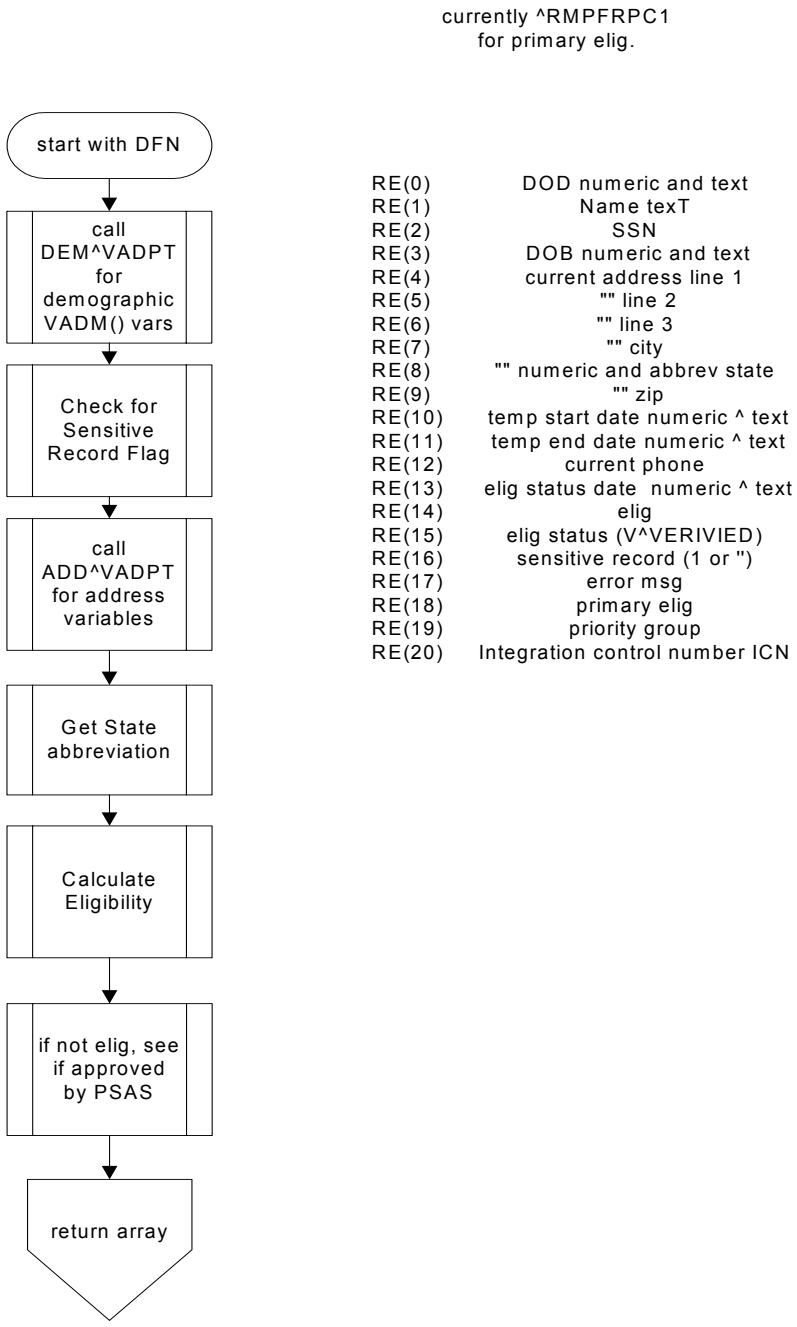
The following diagram describes the flow of functions performed when the ROES option is selected from the CPRS Tools menu:




*ROES 3.0 Patient Order from CPRS Flowchart*

## *Get Patient Information*

The following diagram describes the tasks performed by the 'Get Patient Information' function on the previous page.



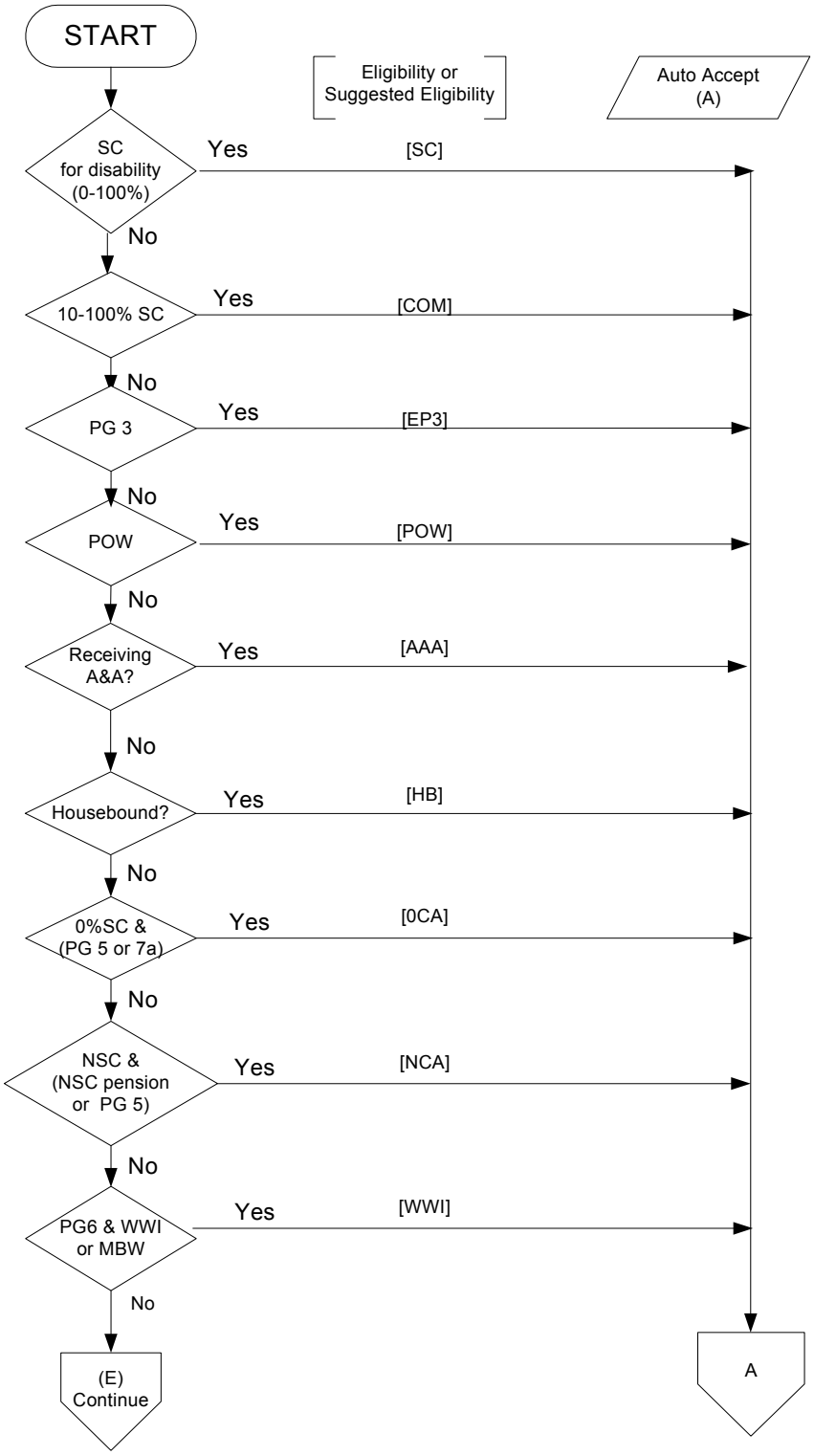

*ROES 3.0 Get Patient Information Flowchart*

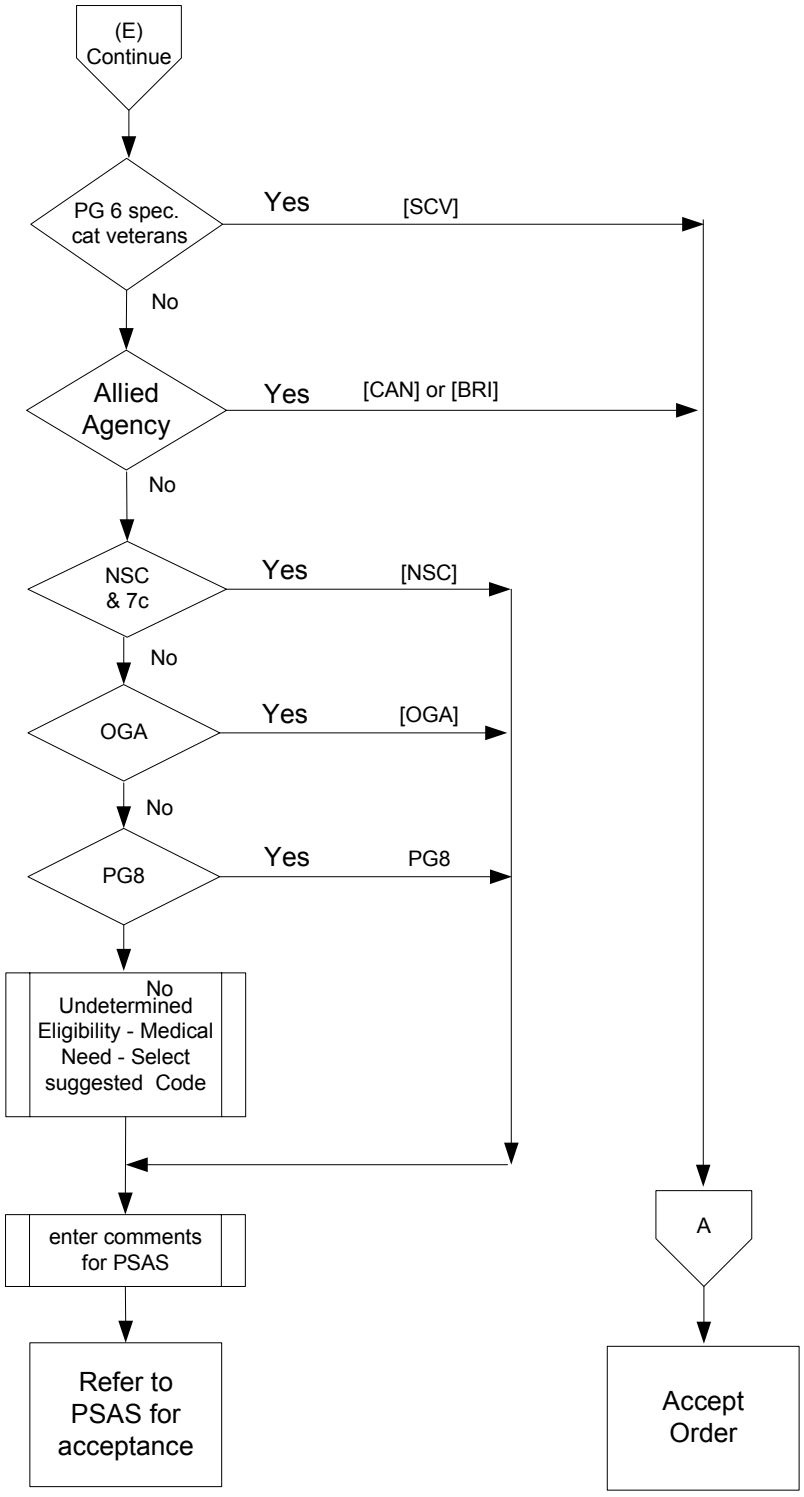
## *Eligibility Determination*

The following diagram describes the algorithm used within the application code to determine patient eligibility for DDC products and services. The business rules used in this eligibility determination were developed in accordance with national ASPS Program Office and VA policy and regulations.

M rtn: ^RMPFRPC0

## Eligibility Calculation

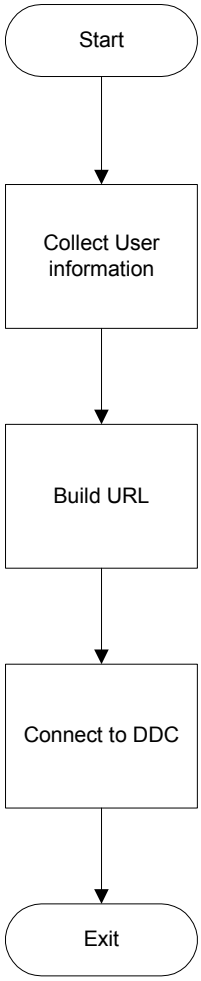





*ROES 3.0 Eligibility Calculation Flowchart*

## *Desktop Station Order Application*

The following diagram describes the flow of functions performed when the ROES stand-alone (non-CPRS) desktop application is invoked.




*ROES 3.0 Desktop Station Order Flowchart*

# Chapter 4: Routines

## *V*ist*A Routine List*

| ROUTINE | DESCRIPTION |
|---|---|
| **RMPFRPC0** | Used by RPC RMPFELIG to collect information and calculate eligibility and return to Windows. |
| **RMPFRPC1** | Used by RPC RMPFDEMOG to collect patient demographic information and return to the Windows. |
| **RMPFRPC3** | Handles messages between PSAS and ASPS regarding eligibility. |
| **RMPFDE2** | Holds the function setting up the list of eligibility requests that have not been approved or rejected. Used by **V*ist*A** menu option RMPFDE2 (Display Eligibility Requests). |
| **RMPFDE3** | Eligibility approval process for menu option RMPFDE2. |
| **RMPFDE4** | Sends alerts when eligibility requests have not been acted on. Used by **V*ist*A** menu option RMPFDE4 that is placed as a scheduled option to run daily. |

Upon selection of the ROES 3.0 option from the CPRS Tools menu, an RPC Broker lookup is done to retrieve the patient DFN. A call is then made through the RMPFDEMOG RPC. From the PATIENT file, the name, SSN, date of birth, current address, and temporary address parameters are retrieved. The routine RMPFRPC0 is then called for the eligibility calculation information. This routine is also called from the RMPFELIG RPC.

## *Delphi Routine list*

| ROUTINE | DESCRIPTION |
|---|---|
| **ROES3.exe** | Main application for patient orders. |
| **R3Main.pas** | Main Pascal program for ROES3.exe. |
| **FMainForm.dfm** | Main form for the application. |
| **CopyUtil.pas** | Formats and copies the order information. |
| **FMemoForm.dfm** | Form used in the copying and formatting. |
| **uR3Elig.pas** | Determining the patient eligibility. |
| **FR3Elig.dfm** | Form used to select suggested eligibility and add comments. |
| **Roes3DeskTop.exe** | Main station order routine to be run from the desktop. |
| **DesktopApp.pas** | Main Pascal program for the desktop application. |

# Chapter 5: Exported Options

## *ROES 3.0 Patient Order from CPRS (GUI)*

In order to invoke the Delphi utility that initiates access to ROES 3.0, the **RMPF ROES3** option should be assigned to any individual who places ROES 3.0 orders for patient-specific items. ROES 3.0 users are typically ASPS and PSAS staff as designated by the appropriate Service Chief. A call to the executable **ROES3.EXE** will normally be placed on the CPRS Tools menu (*see ROES 3.0 Installation Manual*).

NAME: RMPF ROES3
MENU TEXT: ROES 3 OPTION ACCESS
TYPE: Broker (Client/Server)
PACKAGE: REMOTE ORDER/ENTRY SYSTEM
DESCRIPTION: This is the option that allows user's to access the Delphi executable that connects the user to the DDC Website from the desktop or CPRS Tools menu.
RPC: RMPFDEMOG
RPC: RMPFELIG
RPC: RMPF ELIG MSG
RPC: DDR GETS ENTRY DATA
RPC: DDR LISTER
RPC: DDR FINDER
RPC: DDR KEY VALIDATOR
RPC: DDR GET DD HELP
RPC: DDR VALIDATOR
RPC: XUS AV CODE
RPC: XUS SIGNON SETUP
RPC: XUS AV HELP
RPC: XUS GET USER INFO
RPC: XWB CREATE CONTEXT
RPC: XWB GET VARIABLE VALUE

## *Station Orders from the Desktop (GUI)*

As described earlier, a desktop (non-CPRS) application is also available for initiating certain types of orders through ROES 3.0. In order to run this application, the user must also have the **RMPF ROES3** option assigned to his/her menu tree for the context to be created. The executable is **Roes3Desktop.exe** and consists of Delphi routines: DesktopApp.pas and an invisible form, Form1.dfm.

This option should be assigned to ASPS and PSAS staff who place ROES orders other than patient-specific orders through the CPRS entry point. This may or may not be the same staff who use the CPRS option, as determined by the appropriate Service Chief. Prior to installation, the DDC establishes one or more persons at each facility who have 'Supervisory' access to ROES 3.0. These designated ROES supervisors use a module within the desktop application to indicate order entry/approval privileges for each member of their staff. See the *ROES 3.0 Installation Manual* for more detailed instructions.

## Notice of Pending Eligibility Requests (VistA)

When the related software algorithm cannot determine a patient's eligibility, a request is sent to PSAS staff for an eligibility determination. If a response is not received from PSAS within seven days, a daily alert is generated. The ROES 3.0 option to notify PSAS that there are eligibilities that have gone at least seven days without an action is **RMPFDE4**. This **V*ist*A** option invokes a routine that loops through the global ^RMPF(791814,"C",2,) (see *Chapter 2*). The second piece of the zero node contains the request date. If seven or more days have elapsed since the request date and it is still in pending status, an alert is sent to the RMPF ROES UPDATES (PSAS) mail group as a reminder that a request is awaiting action. This option should be scheduled (see the *ROES 3.0 Installation Manual*).

NAME: RMPFDE4
MENU TEXT: Auto Que of Eligibility Request Alerts
TYPE: run routine
PACKAGE: REMOTE ORDER/ENTRY SYSTEM
DESCRIPTION: This is a ROES3 option that loops through the requests for eligibility determinations from ASPS. The alerts are sent to the requesting user and the RMPF ROES UPDATES (PSAS) mail group. The alerts start after the request has been entered and not acted on within 7 days. They are sent daily until acted upon by PSAS with an Edit, Reject, or Acceptance.
ROUTINE: START^RMPFDE4
UPPERCASE MENU TEXT: AUTO QUE OF ELIGIBILITY REQUES

## Prosthetics Eligibility Approval (VistA)

Selected PSAS staff should have access to the **RMPFDE2** option to evaluate eligibility determinations for certain patient-specific orders. This **V*ist*A** option lists requests for eligibility approval that have not been acted upon, as maintained within the ^RMPF (791814,"C",2) global. This option should be assigned to whoever is responsible (as determined by PSAS staff) for approving ROES 3.0 patient eligibilities. No RPCs are used. After listing the requests awaiting action, the user may edit, approve, or reject the request. This fills in the information in the ROES ELIGIBILITY CONFIRMATION file (#791814) and changes the kill date in the 4$^{th}$ piece of the zero node to two years into the future. This option also notifies everyone in both the PSAS and ASPS ROES mail groups that an action has been taken.

NAME: RMPFDE2
MENU TEXT: Display ROES3 Eligibility Requests
TYPE: run routine
PACKAGE: REMOTE ORDER/ENTRY SYSTEM
DESCRIPTION: This option allows the processing of requests for eligibility determination from PSAS.
ROUTINE: LIST^RMPFDE2(.ARRAY)
UPPERCASE MENU TEXT: DISPLAY ROES3 ELIGIBILITY REQU

## Archiving/Purging

There are no package-specific archiving or purging procedures or recommendations for the ROES 3.0 package. All product and order detail information is stored and maintained on the DDC system. The only locally-stored information is that related to patient eligibility determination, which is stored in the ^RMPF(791814 the ROES ELIGIBILITY CONFIRMATION global. In general, retention of entries is required for a minimum of two years from the date an eligibility assessment is entered into the file. Purging of entries beyond this time frame is being considered and if appropriate, a purge function will be issued in a future ROES 3.0 patch. The associated

comments shared between ASPS and PSAS are included in the Message file (# 3.9) text. These messages are subject to the standard VA MailMan archival/purging practices in place.

Upon implementation and complete cutover to ROES 3.0, many of the **V*ist*A** routines and globals maintained on the local VAMC system under ROES 2.0 will no longer be needed. The DDC will provide separate guidance regarding proper removal of residual ROES 2.0 components.

# Chapter 6: Entry Points & APIs

## *New Remote Procedures*

| RPC NAME | PURPOSE | INPUT | OUTPUT |
|---|---|---|---|
| **RMPFDEMOG** | Collection of patient demographic information | DFN from local PATIENT file (#2) | Subscripted array:<br>0=FM and print DOD<br>1=name text<br>2=FM and print DOB 4=current addr line 1<br>5=current addr line 2<br>6=current addr line 3<br>7=current city<br>8=current state<br>pointer and abbrev<br>9=current zip<br>10=FM and print temp start date<br>11= FM and print temp end date<br>12=current phone<br>13= FM and print elig status date<br>14=calc eligibility<br>15=elig status (V^Verified)<br>16=sensitive record |

| RPC NAME | PURPOSE | INPUT | OUTPUT |
|---|---|---|---|
| | | | (1 or "")<br><br>17=error message<br><br>18=primary eligibility<br><br>19=priority group |
| **RMPFELIG** | Collection of patient eligibility information | DFN from local PATIENT file (#2) | Subscripted array:<br><br>(0)= FM and print DOD<br><br>(1)= FM and print eligibility status date (2)=calculated ROES3 eligibility<br><br>(3)=eligibility status(V^Verified)<br><br>(4)=sensitive record(1 or "")<br><br>(5)=error msg<br><br>(6)=primary elig<br><br>(7)=priority group number |
| **RMPF ELIG MSG** | Delivery of a request for eligibility verification to the RMPF ROES UPDATES (PSAS) mail group | (1) DUZ of the user sending the message<br><br>(2) GRP is the Mail Group to send to<br><br>(3) SUBJ is the subject for message<br><br>(4) RMPFARR is an array containing the message text | Returns the VA MailMan message number or an error. |

## External Relations

ROES 3.0 requires a standard **V*ist*A** operating environment, **V*ist*A** RPC Broker and Internet Explorer in order to function correctly. See the recommended minimums in *Orientation* section of this manual.

As described in the Application Architecture Overview, the VAMC resident components interface externally with the DDC Web-based ROES 3.0 application. Once a ROES 3.0 order has been submitted and the order enters the DDC processing cycle, DDC order fulfillment systems complete the processing and payment of the order through established external interfaces, such as those with the VA Financial Management System (FMS) and with DDC contract vendors.

## Integration Agreements

| ROUTINE | FILE NUMBER | AGREEMENT # |
|---|---|---|
| RMPFRPC0 | 2 | # 174 |
| RMPFRPC1 | 38.1 | # 767 |

## *Internal Relations*

### Authority to Use ROES 3.0

Access to the ROES 3.0 options is controlled by menu assignment and application access (see the *ROES 3.0 Installation Manual* for details). Supervisors are designated and assigned within the DDC system (in coordination with the respective Service Chief) and determine the level of order entry/approval privileges for members of their staff. Only supervisors have access to the DDC module used for assigning these privilege levels. All users accessing the DDC Web application must have the appropriate security agreement signed and on file before access to the DDC Web application will be allowed. If a user already has access for the Remote Inquiry System from ROES 2.0, they will already be in the system and can continue to use their assigned codes.

### Internal Option Use

ROES 3.0 option RMPFDE4 can be invoked independently to send alerts to PSAS about requests for eligibility determination that are over 7 days old. Preferably, it should be scheduled using TaskMan to run daily. The initial timeframe can be changed from 7 days by setting the value of RMPFDY to another number of days in the TaskMan Scheduler option. The Installation Manual has detailed instructions for the setup of this option.

### Remote System Access

ROES 3.0 includes no specific restrictions or limitations on remote access to the application. However, note that ROES 3.0 can be accessed only through the Delphi executable applications integrated into the CPRS and desktop entry points. The methodology used to implement remote access must allow for adequate performance of RPC broker-based applications. If the remote access implementation is sufficient to support broker access and CPRS, then ROES 3.0 access should be adequately supported, as well.

# Acronyms

| TERM | DESCRIPTION |
|---|---|
| **API** | Application Programmer Interface |
| **ASPS** | Audiology and Speech Pathology Service |
| **DDC** | Denver Distribution Center |
| **GUI** | Graphical User Interface |
| **HTTP** | HyperText Transfer Protocol |
| **IRM** | Information Resource Management |
| **PSAS** | Prosthetics and Sensory Aid Service |
| **ROES** | Remote Order Entry System |
| **RPC** | Remote Procedure Call |
| ***VistA*** | Veterans Health Information Systems and Technology Architecture |

# Glossary

| TERM | DEFINITION |
|---|---|
| **ALERTS** | Brief online notices that are issued to users as they complete a cycle through the menu system. Alerts are designed to provide notification of pending computing activities, such as the need to process a request for eligibility. |
| **APPLICATION PACKAGE** | Software and documentation that support the automation of a service. In this case, the Remote Order Entry System. |
| **KERNEL** | A set of V*ist*A software routines that function as an intermediary between the host operating system and the V*ist*A application package (in this case ROES 3.0). |
| **LISTENER** | In ROES 3.0 this is the RPC Broker on the workstation and the server. |
| **NAME SPACING** | A convention for naming V*ist*A package elements, assigned by the Database Administrator (DBA). For ROES 3.0 the name spacing is RMPF. |
| **OPTION** | An item in the V*ist*A OPTION file (#19). |
| **ROUTINE** | Groups of program lines that are saved, loaded, and called as a single unit via a specific name. |
| **SECURITY KEY** | A non-visual object or code that provides a layer of protection on the range of computing capabilities available with a particular software package. ROES 3.0 uses menu access for controlling access to its options. |
| **SUBSCRIPT** | A numeric or string value that identifies a specific node within an array or global. |

# Appendices

## *A: Error and Other Messages*

The message **'No Patient has been selected'** appears if a patient name or DFN was not entered.

The message **'Invalid Patient Selection**.' appears if the patient lookup fails in the CPRS tools option.

The message '**Cannot order without a SSN**' appears if the SSN field in the PATIENT file is blank.

The message **'Cannot order Through ROES without a Patient Date of Birth'** appears if the DATE OF BIRTH field in the PATIENT file is blank.

The message **'Cannot order through ROES without a Patient Name'** appears if the NAME field is blank in the PATIENT file.

The message **'**Alert** Allied Agency Agreement 'must be on record at the DDC'** if the patient's eligibility is calculated to be either CAN (Canadian) or BRI (British) and Service Connected.

The message **'Cannot order with this eligibility: (elig) Ordering requires PSAS Approval'** if the patient does not have a calculated eligibility or the eligibility selected is BLR, VOC, NSC or NONE.

The message **'Order Eligibility (eligibility name) was disapproved by (user name)'** is shown when ASPS attempts an order and PSAS has responded to the eligibility request by rejecting it. It remains in that status for 30 days after rejection.

The message **'Eligibility (eligibility name) was approved by (user name)'** is shown when ASPS attempts an order and PSAS has responded to the eligibility request by accepting an eligibility. It remains in that status for 30 days after approval.

The message **'Failed to connect to Denver**. ***** DO NOT SIGN THE ORDER -- IT WILL BE DENIED *****' is shown when the http connection to the DDC Website fails.

The message **'Could not retrieve necessary patient information'** is shown if the lookup of patient demographic information fails.

The message **'Connection to Broker Server could not be established'** if the connection to the selected Broker port could not be completed.

The message **'You do not have access to this option (context failed)'** is shown if the user does not have the necessary option assigned to his menu tree.

The message **'A problem was encountered communicating with the Server (XUS GET USER INFO could not be executed)'** is shown if this remote procedure call fails.

The message **'User Authorization could not be established'** is shown if the above remote procedure call returns a nil.

The message **'Message to PSAS not sent - error encountered!'** is shown if the remote procedure call RMPF ELIG MSG fails.

The message **'Message number to PSAS and User is: (message #)'Sent: (date/time)'** is shown after a request for eligibility is sent to PSAS for approval.

The message **'If an Order was placed it will now be formatted and placed on ClipBoard.**

**Close this box ONLY when finished with the order**

***** Thank you for visiting the DDC ***'**

is shown after closing the DDC Web page (EXIT ROES) for a patient order. Station orders are accessed from the Desktop application and are not prepared for pasting into the CPRS notes pages.

## B: Mail Groups

1. RMPF ROES UPDATES (ASPS) receives messages (VA MailMan) that a request for eligibility has been returned from PSAS.
2. RMPF ROES UPDATES (PSAS) receives messages (VA MailMan) that there are pending eligibility determinations or that they have been processed.

These mail groups are set up during the installation, if it was not set up during a prior ROES 3.0 install. At that time a coordinator was selected for each group and they would add the necessary individuals to their group. See the *ROES 3.0 Installation Manual* for further instructions.

## *C: Sample VistA Mail Message with Request for Eligibility Approval*

Subj: ROES Eligibility Request [*msg number*] *Date Sent*
From: PROVIDER,ASPS

---

Please approve the following eligibility:
Patient: TESTPATIENT,ROSEY
SSN: 000009999P
Suggested Eligibility: AAA
AAA Aid and Attendance

Comments:

This is where any comments added to provide assistance in eligibility determination will appear.

## *D: Sample VistA Mail Message with Response to Eligibility Approval Request*

Subj: ROES PATIENT ELIGIBILITY UPDATE [*msg number*] *Date Sent*
From: USER,PSAS

---

ROES Patient Eligibility has been updated for the following patient:

TESTPATIENT,ROSEY 000009999P

EP3

Comment: Accepted

[This shows that the eligibility was approved, but changed to EP3]

## *E: Section 508 Compliance Statement*

This application has been evaluated and approved for compliance with Section 508 of the Rehabilitation Act Amendments of 1998.

## *F: Request for Access and Verify Codes from DDC*

Please send an e-mail to G.IRM@DDC.VA.GOV or DDC IRM@MAIL.VA.GOV to request the necessary forms or call DDC Customer Support at (303) 914-5145.

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